

TO: Patrick Nejand, Project Manager
Ken Mass, Project Manager
United States Army Corps of Engineers (USACE)

FROM: Nathan Canaris, Project Manager
Los Alamos Technical Associates, Inc. (LATA)

SUBJECT: April 2015 Inspection Report for the former Cornell Dubilier Electronics (CDE) Superfund Site, South Plainfield, New Jersey

LATA Project # 11266
Contract # W912DQ-09-D-3003,
Task Order # 0011

DATE: May 1, 2015

CURRENT ACTIVITIES

LATA's technician visited the Cornell Dubilier Electronics (CDE) Superfund Site for the regularly scheduled inspection visit on April 27, 2015 to perform the routine inspection of the facilities.

Work performed during the visit included; picked up trash from the fence line, inspected the catch basin and drainage basin system, inspected the perimeter fence, gates, etc., pulled woody vegetation from accessible areas of the drainage basin, cleared brush from the southeastern perimeter fence and downloaded the data from the basin dataloggers. Copies of the inspection forms and photo documentation of the site visit are attached to this report.

Approximately three bags of trash (paper, plastic bottles, etc.) were picked up from around the fence line in various areas. The trash was disposed of in the local technician's office dumpster.

LATA met with USACE and USEPA on April 27, 2015 to review the condition of the pavement at the site and discuss expectations for the pavement repair activities. Three members of LATA's asphalt contractor were on-site to begin pavement repair activities. Deery 5078 Hot Applied Sealant (see attachment for material specifications) was applied to 6,730 linear feet of cracks in the pavement. A second layer of material was applied to 1,109 linear feet of deeper cracks in an effort to completely seal the crack.

LATA was on-site with the asphalt contractor on April 28, 2015 to continue with pavement repair activities. Deery 5078 Hot Applied Sealant was applied to 1,393 linear feet of cracks in the pavement. From one to four additional layers of material were applied over a total of 9,081 linear feet of deeper cracks in an effort to completely seal the crack. The attached photo log for pavement repair activities shows how deeper cracks were filled with additional layers of material.

Also attached with this report is a chart summarizing the water level in the detention basin along with precipitation data. The water level data is recorded using a barometrically compensated Solinst® level logger which was installed in the detention basin in September 2014. The precipitation data is provided by the USGS from a heated rain gauge located approximately five miles from the site in Middlesex, NJ. Since installation of the level logger, no rainfall events have occurred which met the design rainfall event criteria of 1.25 inches of rain in a two hour period.

MANPOWER REPORTING

Date	LATA Labor
April 27, 2015	36 hrs.
April 28, 2015	34 hrs.

OUTSTANDING ISSUES/RESOLUTIONS

None

PLANS FOR NEXT MONTH

Plans for the May 2015 visit includes inspection and general housekeeping activities and downloading the drainage basin level datalogger.

Site Inspection Forms and Photo Log

Operation & Maintenance Inspection Form
Cornell-Dubilier Electronics Superfund Site
Operable Unit (OU-2)

Inspection being Conducted	X	Monthly
Quarterly	Annually	After 1" or Greater Rainfall

Inspection Date: 4/27/2015 **Weather** Overcast, 50s

Inspectors Name **Sunil Samaroo**

Basin Inspection:

Catch Basins (23 Structures)

Yes No N/A

1. Are catch basins properly draining?

☐ X ☐ ☐

2. Are the catch basins clear of trash, sediment and debris?

☒ ☐ ☐

3. Has vegetation been removed from all catch basin areas?

☐ ☐ ☒

4. Are there any signs of damage or deterioration of catch basins?

☐ ☒ ☐

If yes, which catch basin(s)?

(Refer to Record Drawings for catch basin numbers)

Stormwater Detention Basin and Surface Sand Filter:

5. Does the basin have pooled or standing water?

☒ ☐ ☐

If yes, describe where **Water was observed in 1 of 3 detention basins**

6. What is the water height **Less than 1"**

Approximately how many hours was the last rainfall?

How many inches of rain?

7. Does the bottom appear relatively flat? No sand has washed away?

☒ ☐ ☐

8. Are concentrated flows of runoff being unexpectedly directed into the basin?

☐ ☒ ☐

If yes, describe where

9. Is there any damage to the sand bed or berms?

☐ ☒ ☐

10. Has vegetation been removed from the basin areas?

☐ ☐ ☒

Operation & Maintenance Inspection Form
Cornell-Dubilier Electronics Superfund Site
Operable Unit (OU-2)

Inlet and Outlet Structures:

12. Is there any standing water?

If yes, describe where

14. Are the outlets (standpipes, 3" Orifice, secondary outlet and emergency spillway) clear of trash, sediment, and debris?

- If yes, describe where

16. Has vegetation been removed from inlet and outlets?

X		
	X	
X		
X		
	X	
		X

Additional descriptions of where repairs or maintenance is needed:

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

Inspector's Signature

Amil Amaro

Operation & Maintenance Inspection Form
Cornell-Dubilier Electronics Superfund Site
Operable Unit (OU-2)

Inspection Date: 4/27/2015 Weather Overcast, 50s

Inspectors Name Sunil Samaroo

"Tree Grove" Inspection

	Yes	No	N/A
1. Is there any tree damage from storms? If yes, describe: _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Is there an accumulation of tree debris? If yes, describe: _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Do any trees appear infested? If yes, describe: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Do any trees appear malnourished? If yes, describe: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Was the last Quarterly Seasonal Maintenance Performed? Date of previous maintenance: _____ (Refer to section 2.3.2 of the Operation & Maintenance Manual)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Was the last Annual Arborist Inspection performed? Date of previous inspection: _____ (Refer to section 2.3.3 of the Operation & Maintenance Manual)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Additional descriptions of where repairs or maintenance is needed:

Tree buffer being maintained "as is" by direction of USACE and EPA.

Inspector's Signature 

Operation & Maintenance Inspection Form
Cornell-Dubilier Electronics Superfund Site
Operable Unit (OU-2)

Inspection Date: 4/27/2015 Weather Overcast, 50s

Inspectors Name Sunil Samaroo

Debris, Trash, Vegetation and Sediment Removal and Inspections
Comments

Removed trash from perimeter fence.

Three bags of trash, disposed of at URS dumpster.

Over all, the site remains in good condition.

General Housekeeping

Comments

Asphalt has minor cracking predominantly at seems, previously observed.

Subcontractor on-site with LATA representative, N. Canaris, performing repairs.

Fencing and Gates

Comments

GOOD

Trash and Debris

Comments

(See above)

Snow Removal

Comments

N/A

**Operation & Maintenance Inspection Form
Cornell-Dubilier Electronics Superfund Site
Operable Unit (OU-2)**

Pavement Inspection (Part of Annual Inspection)

	Yes	No	N/A
1. Is there any standing water? If yes, describe where _____	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Are there any signs of cracking? If so, note location and maintenance effort below.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are there any signs of disintegration? If so, note location and maintenance effort below.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Are there any signs of distortion? If so, note location and maintenance effort below.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Has all vegetation been removed? If applicable, note location of vegetation below	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Has usage of the site increased to a point that warrants a Pavement Condition Index (PCI) Survey?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Have any Critical Preventative Maintenance (CPM) Pavement Treatments been applied? When was date of the last CPM treatment? <u>4/27/15 through 4/28/15</u> (Refer to Section 2.2.3 of the Operations & Maintenance Manual)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Additional descriptions of where repairs or maintenance is needed:

Cracks in asphalt developing in the area of the water tower, previously observed.

Subcontractor on-site with LATA representative, N. Canaris, performing repairs.

Inspector's Signature



Operation & Maintenance Inspection Form
Cornell-Dubilier Electronics Superfund Site
Operable Unit (OU-2)

Basin Drainage Rate Inspection:
(completed twice a year after a design rainfall event)

Date: _____

Design Rainfall Event Information
Requirements: 1.25" of rain in 2 hrs

Start: _____
Stop: _____
Inches of Rainfall: _____

Inspection Data

Start inspections 16 hours after design rain event
Perform subsequent inspection every 2 hours until height of water drops below the top of the aggregate in the middle basin

Inspection Run #	Target time from Event (hrs)	Actual Time	Water Height (ft)
1	16		
2	18		
3	20		
4	22		
5	24		
6	26		
7	28		
8	30		
9	32		
10	34		

Note approximate time water was drained below top of sand bed and compared to the normal drain time of 21 hrs.

Inspector's Signature

04-27-2015 Cornell-Dubilier Electronics

Overcast, 50s

Site Inspection photos

Fence drive by inspection photos









Additional site photos







Pavement Repair Activities Photo Log



Pavement cracks prior to repairs. This crack was located on the north end of the property. The picture on the left shows the western end of the crack. The picture on the right shows the eastern of the same crack.



Pavement cracks prior to repairs. The crack on the left was located on the north end of the property, east of the water tower. The crack on the right was located near the south end of the property.



Pavement cracks prior to repairs. The crack on the left was located near the south end of the property. The crack on the right was located outside the fence around the southern side of the detention basins.



Pavement crack prior to repairs. This crack was located west of the detention basins.



Asphalt contractors and equipment.



Application of Deery 5078 Hot Applied Sealant to cracks in pavement.



Asphalt contractors applying material to cracks in pavement on the north side of the property.



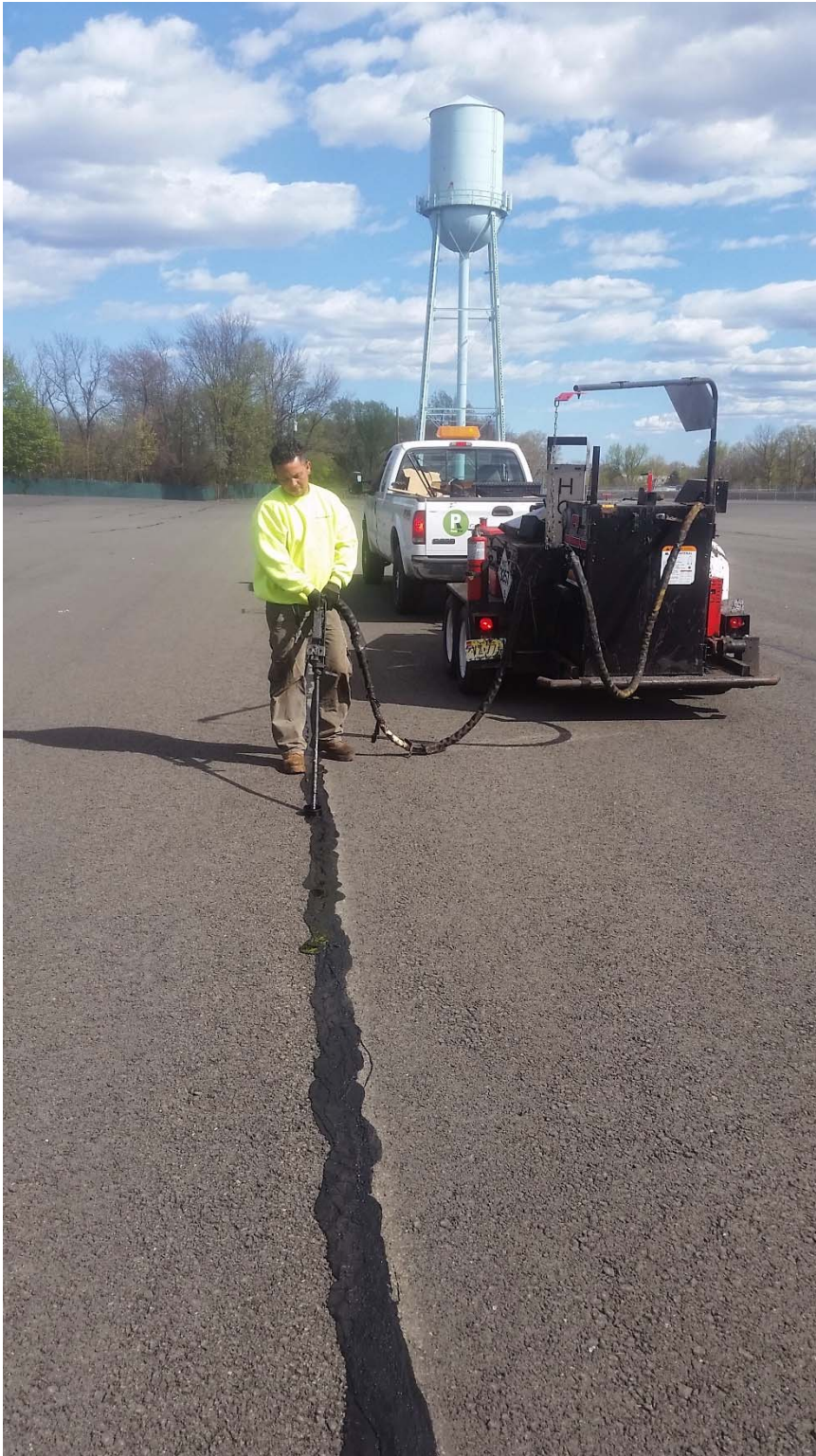
Same crack after first (left) and second (right) application of material. Located on the south side of the property, sealing of this crack was completed after the third application.



Same crack after first, second and third application of material. Located on the south side of the property, sealing of this crack was completed after the third application.



Same crack after second (left) and fourth (right) application of material. Located on the south side of the property, sealing of this crack was completed after the fourth application.



Complete sealing of this crack on the north side of the property required five applications of material.



Located on the south side of the property, these cracks received two applications of material.



Pavement cracks after final application of material.



Pavement cracks after final application of material.

Deery 5078 Hot Applied Sealant Specifications

DESCRIPTION DEERY 5078 is a hot applied, single component, elastically modified composition of asphalt cement, virgin synthetic polymer, recycled rubber, and other modifiers. The sealant contains no solvent, is pre-reacted and conforms to and exceeds the requirements of **ASTM D5078**. VOC=0 g/l.

USE DEERY 5078 is a moderately high viscosity pavement preservation sealant intended for highway, street and aviation applications for sealing longitudinal and transverse joints and random cracks in Asphalt or Concrete pavements where use of high levels of recycled material is desirable. Properly installed, DEERY 5078 is an effective barrier against damage from debris and moisture infiltration into cracks and joints within regions experiencing moderate high and low pavement temperatures.

HEATING Sealant shall be heated in a hot-oil jacketed melter capable of constant mechanical agitation and equipped with a calibrated thermometer to monitor sealant temperature. Material shall be heated to and maintained at Recommended Application Temperature during use. Material can be cooled and then reheated, but only if prolonged heating is avoided. Prolonged heating at or above Recommended Application Temperature may severely damage product. If overheating damage occurs, immediately drain machine completely and refill with new material.

APPLICATION DEERY 5078 is pre-reacted and can be applied immediately after heating to Recommended Application Temperature. With pavement temperature at 40°F (4°C) or higher, place material into clean, dry crack or prepared reservoir by means of a hand-held pour pot, wheeled push bander or wand applicator. Squeegee any excess sealant tight to pavement surface. Pavement may be warmed to 40°F (4°C) or higher with a Hot Air Lance.

PROPERTIES of DEERY 5078

When sampled and heated to maximum heating temperature in accordance with ASTM D5167

<u>TEST</u>	<u>METHOD</u>	<u>SPECIFICATION</u>
Cone Penetration @ 77°F (25°C)	ASTM D5329	70 maximum
Cone Penetration @ 39.2°F (4°C)	ASTM D5329	15 minimum
Resilience @ 77°F (25°C)	ASTM D5329	30% minimum
Softening Point	ASTM D36	150°F (66°C) minimum
Crumb Rubber Content		10-25%
Asphalt Compatibility	ASTM D5329	Pass
Recommended Application Temperature	ASTM D5167	380-400°F (193-204°C)*
Maximum Heating Temperature	ASTM D6690	400°F (204°C)

*Temperature of product measured at pavement surface. Use highest Recommended Application Temperature in cool weather.

*Prolonged heating at or above Recommended Application Temperature may severely damage product.

PACKAGING Material is packaged in cardboard boxes sized to accommodate a maximum of 40 lb (18.0 kg). Material contained in each box is wrapped in a quick melt liner which is dissolved and incorporated into the melted product. Standard packaging is 30 lb (13.6 kg) per box, palletized 75 boxes per pallet with an approximate net weight of 2,250 lb (1,021.0 kg). Pallets are moisture protected with a plastic wrapping and bound with a minimum of two layers of UV resistant stretch wrap.

FOR ADDITIONAL INFORMATION

Call: 1-800-227-4059 toll free

Email: info@deeryamerican.com

Web: www.deeryamerican.com

PERFORMANCE Temperature fluctuations, site conditions, surface preparation, traffic, installation technique, material selection, shape factor and surface treatment compatibility influence the effectiveness and useful life of Pavement Preservation treatments. Consider and monitor each element for optimum results. Purchaser and end user should determine applicability for use in their specific conditions.

WARRANTY Manufacturer warrants that these products meet applicable ASTM, AASHTO, Federal or State specifications at time of shipment. Techniques used for the preparation of the cracks and joints prior to sealing or filling are beyond our control as are the use and application of the products; therefore, manufacturer shall not be responsible for improperly applied or misused products. Remedies against manufacturer, as agreed to by manufacturer, are limited to replacing nonconforming product or refund (full or partial) of purchase price from manufacturer. All claims for breach of this warranty must be made within three (3) months of the date of use or twelve (12) months from the date of delivery by manufacturer, whichever is earlier. There shall be no other warranties expressed or implied. **For optimum performance, follow manufacturer recommendations for product installation.**

Detention Basin Water Level and Precipitation Chart

Detention Basin Water Level and Precipitation

